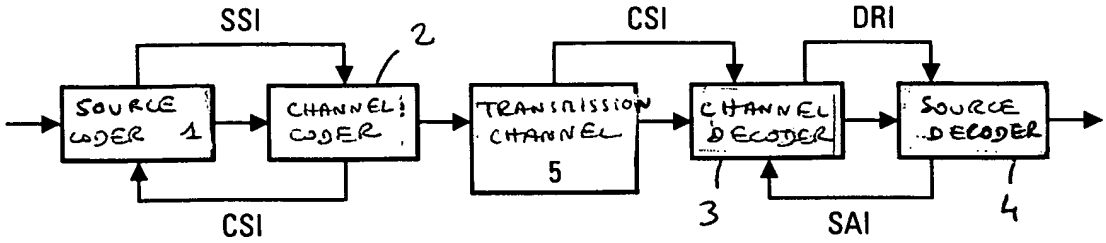


Fig. 1

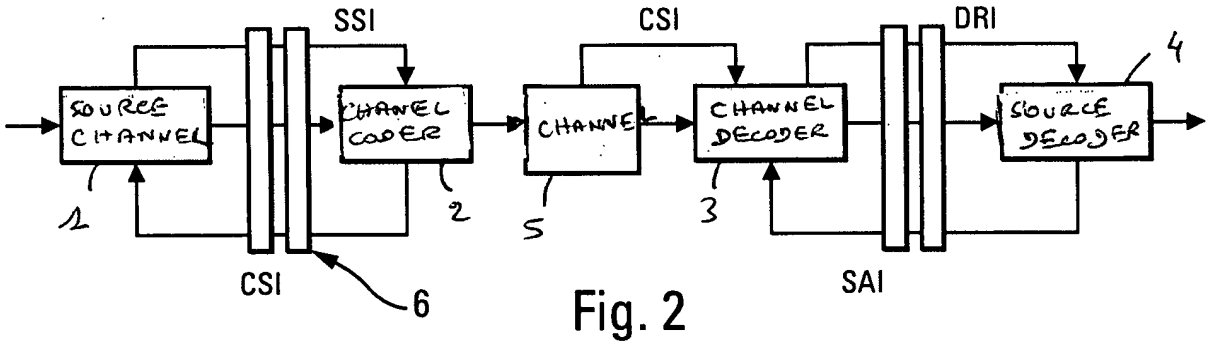


Fig. 2

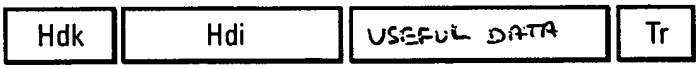


Fig. 3

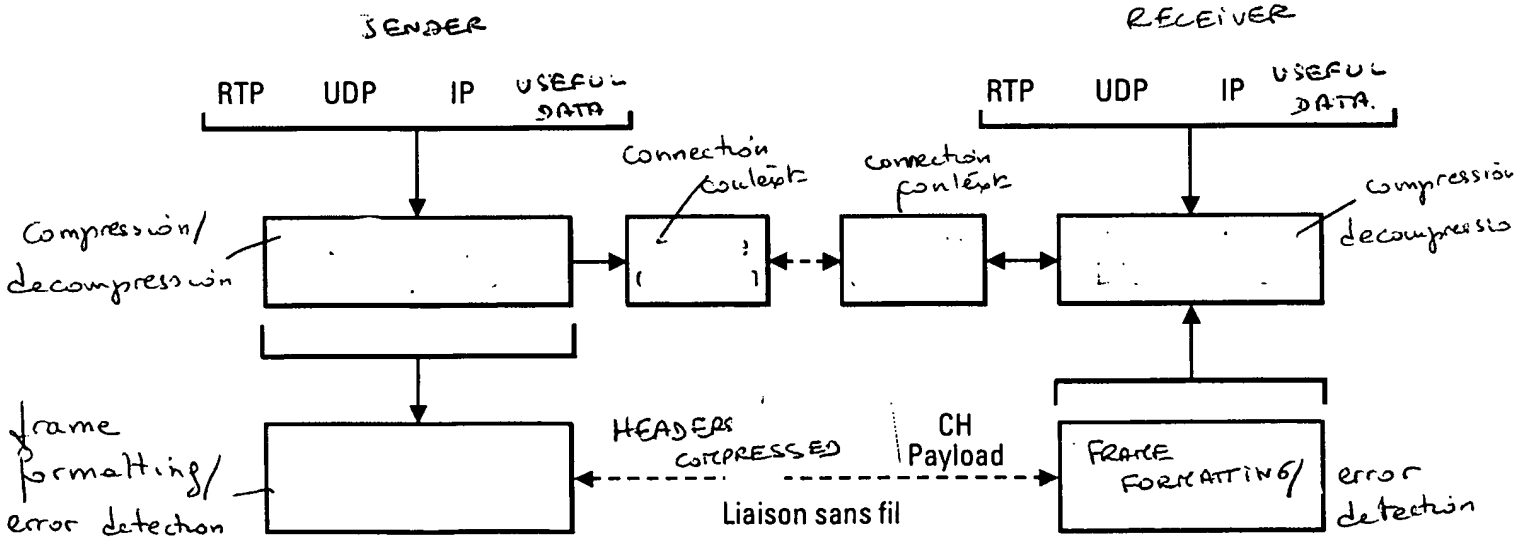
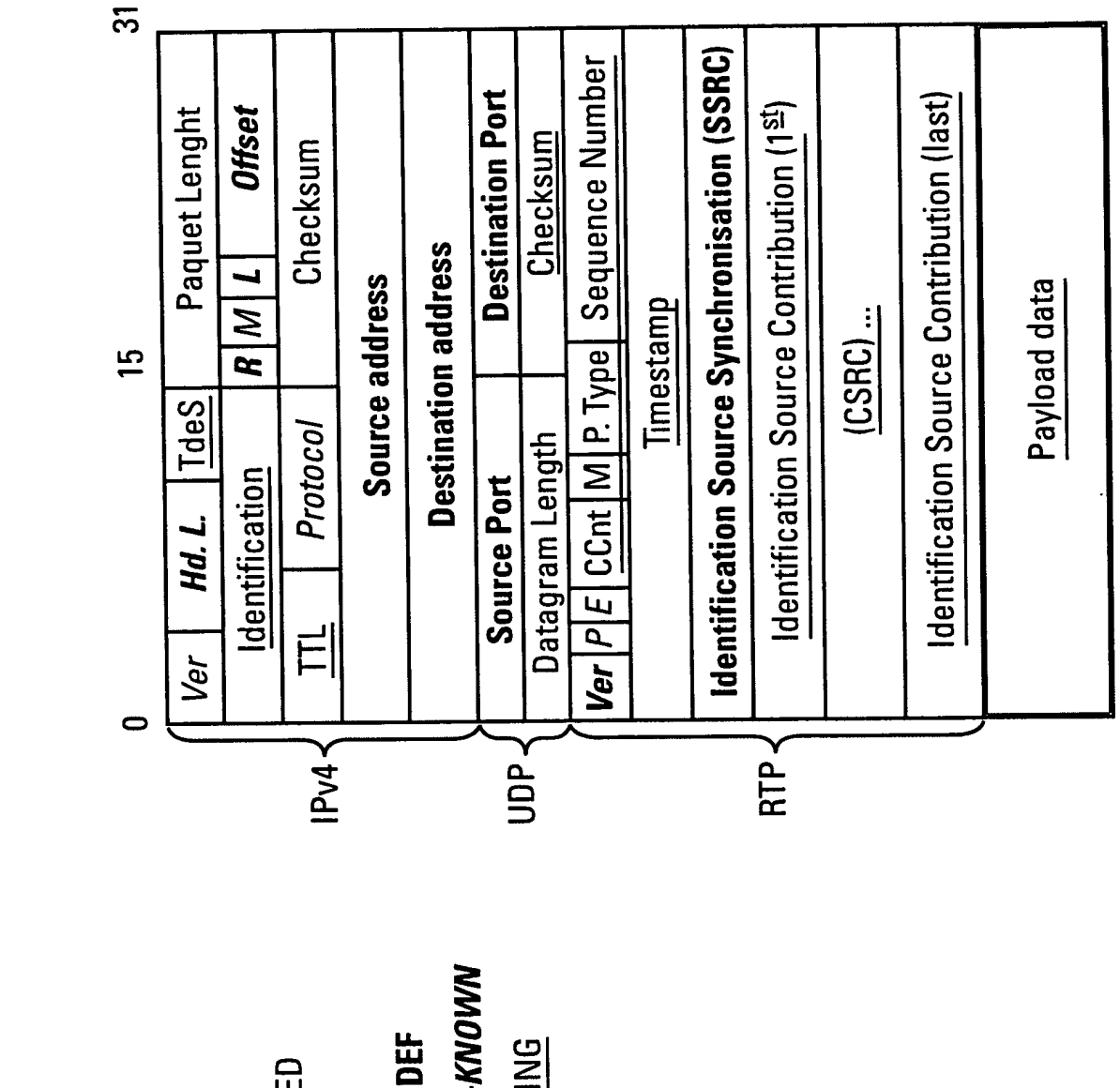


Fig. 4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Hd. L.
TdeS
Paquet Lenght
Identification
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Offset
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Protocol
Checksum
Source address
Destination address
Source Port
Destination Port
Datagram Length
Checksum
Ver
P
E
CCnt
M
P. Type
Sequence Number
Timestamp
Identification Source Synchronisation (SSRC)
Identification Source Contribution (1st)
(CSRC) ...
Identification Source Contribution (last)
Payload data
IPv4
UDP
RTP
• INFERRED
• STATIC
• STATIC-DEF
• STATIC-KNOWN
• CHANGING

Fig. 5

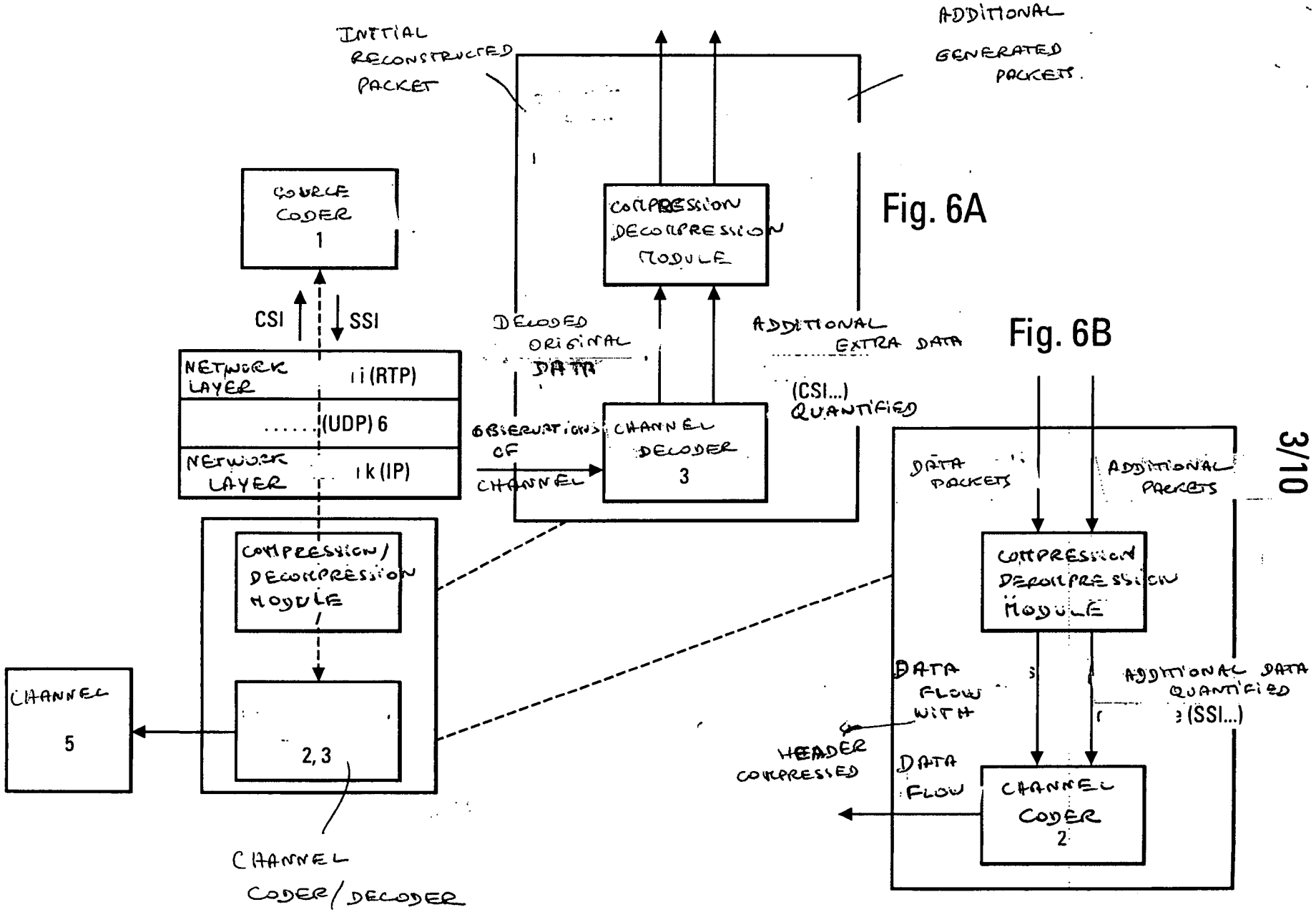

INITIAL RECONSTRUCTED PACKET
ADDITIONAL GENERATED PACKETS
SOURCE CODER 1
COMPRESSION DECOMPRESSION MODULE
CSI
SSI
DECODED ORIGINAL DATA
ADDITIONAL EXTRA DATA
(CSI...) QUANTIFIED
NETWORK LAYER
i i (RTP)
(UDP) 6
NETWORK LAYER
i k (IP)
OBSERVATIONS OF CHANNEL
CHANNEL DECODER 3
COMPRESSION / DECOMPRESSION MODULE
CHANNEL 5
2, 3
CHANNEL CODER / DECODER
DATA PACKETS
ADDITIONAL PACKETS
COMPRESSION DECOMPRESSION MODULE
DATA FLOW WITH
HEADER COMPRESSED
ADDITIONAL DATA QUANTIFIED
(SSI...)
DATA FLOW
CHANNEL CODER 2

Fig. 6A

Fig. 6B

Fig. 7A

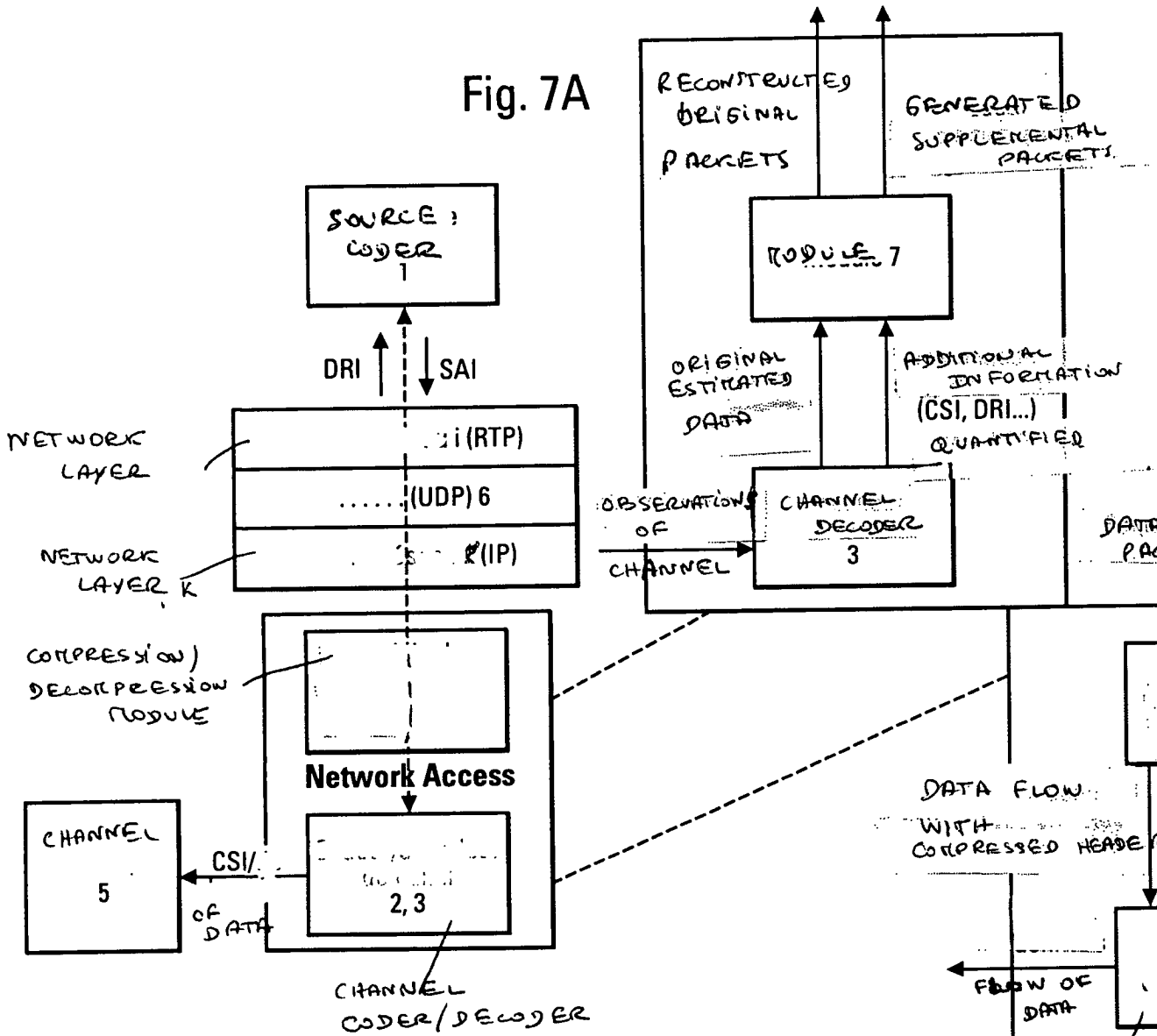

RECONSTRUCTED ORIGINAL PACKETS
GENERATED SUPPLEMENTAL PACKETS
SOURCE CODER 1
MODULE 7
DRI
SAI
ORIGINAL ESTIMATED DATA
ADDITIONAL INFORMATION (CSI, DRI...) QUANTIFIED
NETWORK LAYER
i (RTP)
(UDP) 6
NETWORK LAYER K
(IP)
OBSERVATIONS OF CHANNEL
CHANNEL DECODER 3
COMPRESSION/ DECOMPRESSION MODULE
Network Access
CHANNEL 5
CSI/
OF DATA
2, 3
CHANNEL CODER/DECODER

Fig. 7B

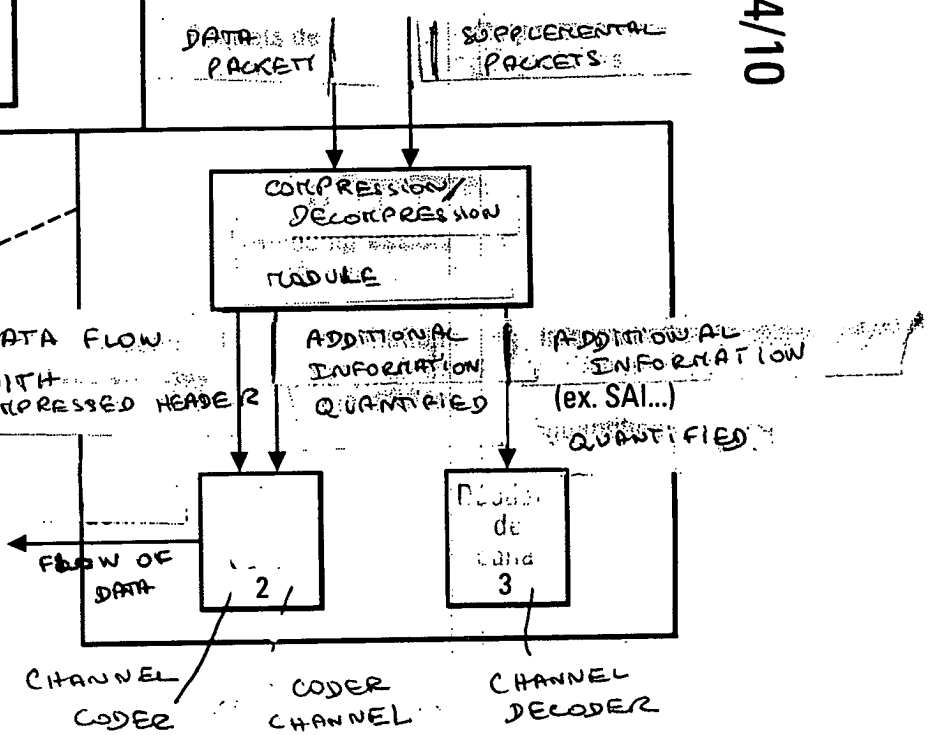
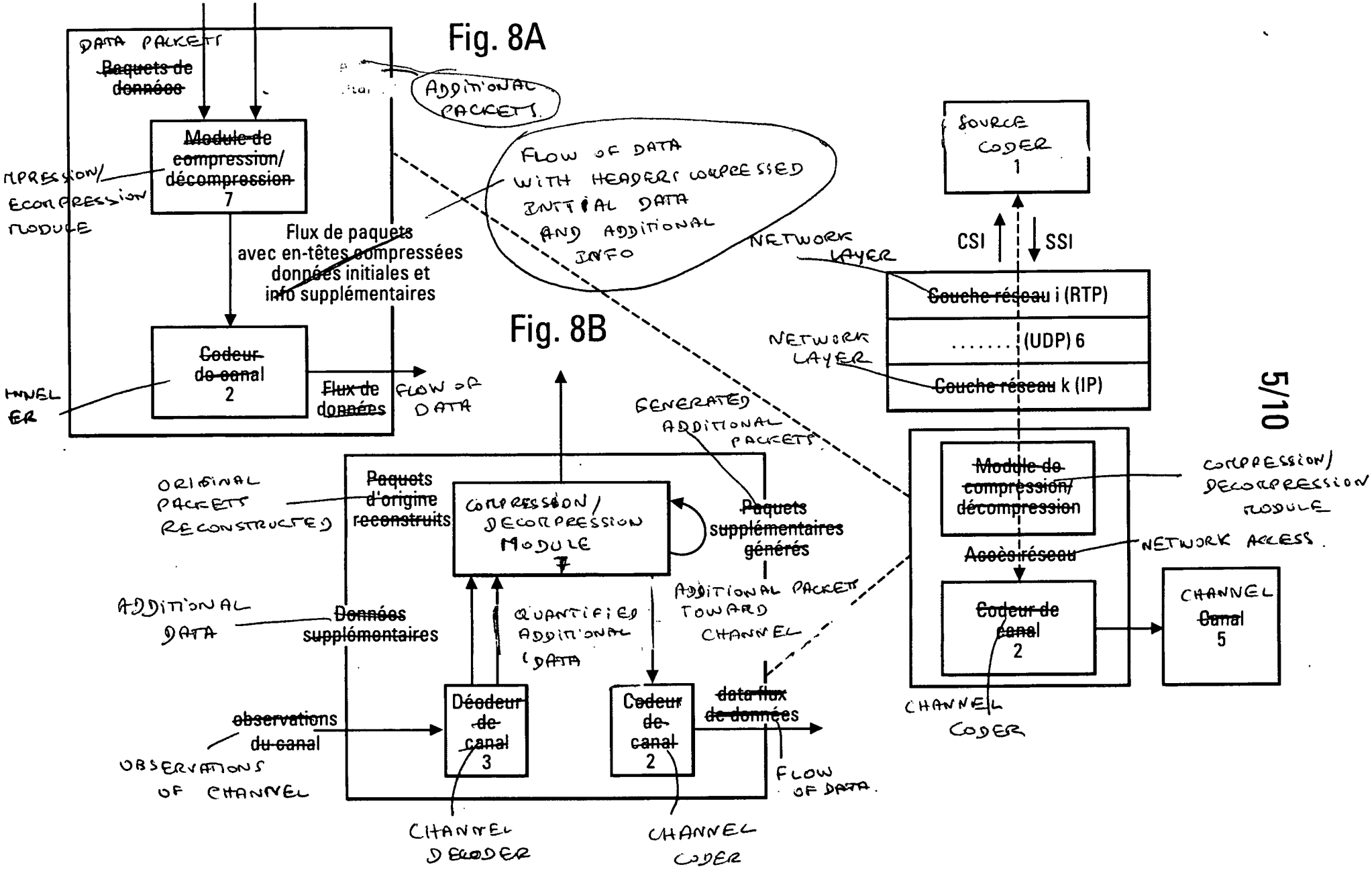

DATA PACKETS
SUPPLEMENTAL PACKETS
COMPRESSION/ DECOMPRESSION MODULE
DATA FLOW WITH COMPRESSED HEADER
ADDITIONAL INFORMATION QUANTIFIED
ADDITIONAL INFORMATION (ex. SAI...) QUANTIFIED
FLOW OF DATA
2
3
CHANNEL CODER
CODER CHANNEL
CHANNEL DECODER

Fig. 8A


DATA PACKETS
Paquets de données
ADDITIONAL PACKETS
Module de compression/ décompression 7
COMPRESSION/ DECOMPRESSION MODULE
FLOW OF DATA WITH HEADERS COMPRESSED INITIAL DATA AND ADDITIONAL INFO
Flux de paquets avec en-têtes compressées données initiales et info supplémentaires
Codeur de canal 2
Flux de données
FLOW OF DATA
CHANNEL CODER
SOURCE CODER 1
CSI
SSI
NETWORK LAYER
Couche réseau i (RTP)
..... (UDP) 6
Couche réseau k (IP)
NETWORK LAYER
Fig. 8B
GENERATED ADDITIONAL PACKETS
ORIGINAL PACKETS RECONSTRUCTED
Paquets d'origine reconstruits
COMPRESSION/ DECOMPRESSION MODULE 7
Paquets supplémentaires générés
ADDITIONAL DATA
Données supplémentaires
QUANTIFIED ADDITIONAL DATA
ADDITIONAL PACKETS TOWARD CHANNEL
Module de compression/ décompression
COMPRESSION/ DECOMPRESSION MODULE
Accès réseau
NETWORK ACCESS
Codeur de canal 2
CHANNEL 5
CHANNEL CODER
observations du canal
OBSERVATIONS OF CHANNEL
Décodeur de canal 3
Codeur de canal 2
data flux de données
FLOW OF DATA
CHANNEL DECODER
CHANNEL CODER

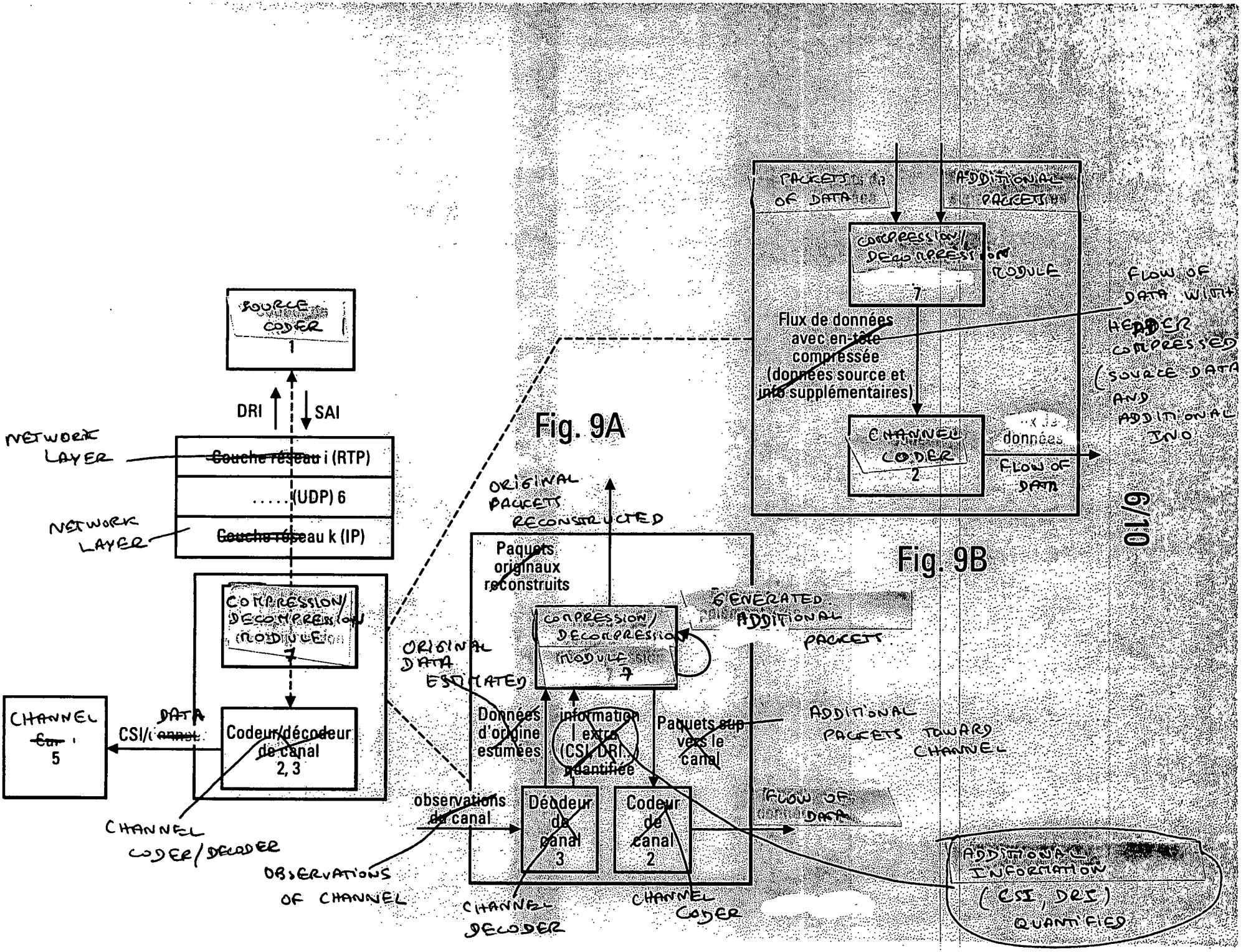
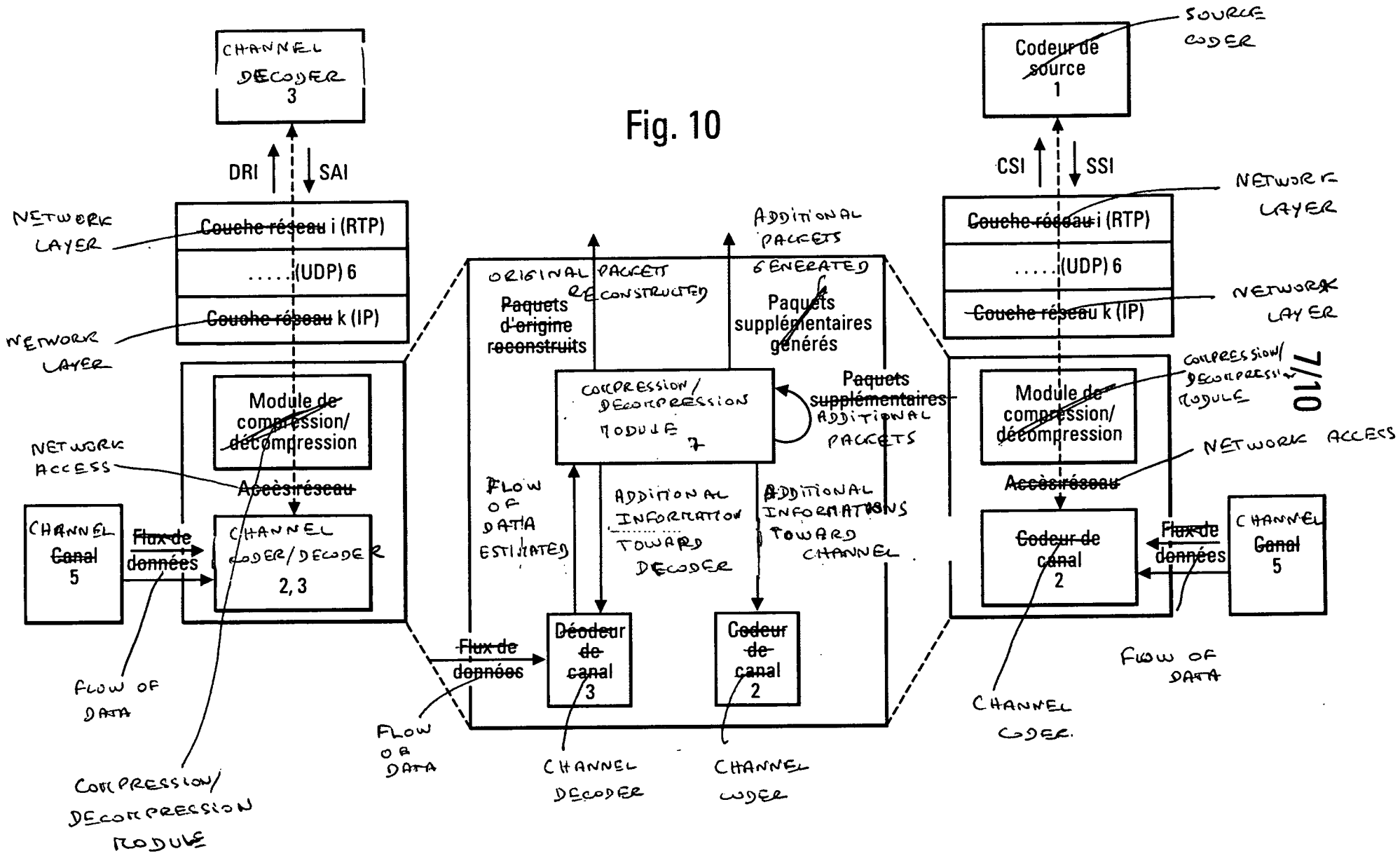
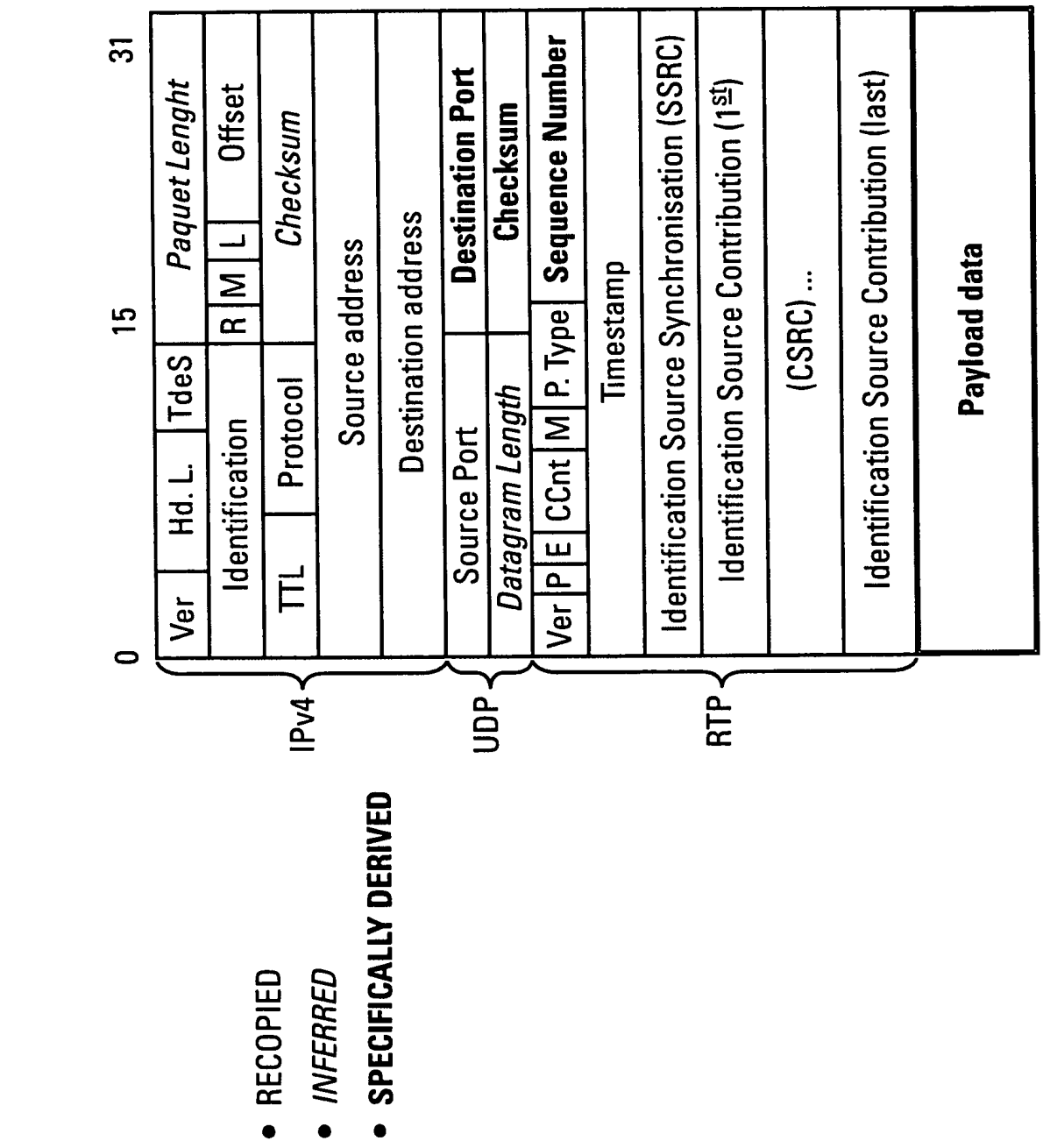

SOURCE CODER 1
DRI
SAI
NETWORK LAYER
Couche réseau i (RTP)
(UDP) 6
NETWORK LAYER
Couche réseau k (IP)
COMPRESSION/ DECOMPRESSION MODULE 7
CHANNEL 5
DATA
CSI/(annot.
Codeur/décodeur de canal 2, 3
CHANNEL CODER/DECODER
OBSERVATIONS OF CHANNEL
Fig. 9A
PACKETS OF DATA
ADDITIONAL PACKETS
COMPRESSION/ DECOMPRESSION MODULE 7
Flux de données avec en-tête compressée (données source et info supplémentaires)
CHANNEL CODER 2
FLOW OF DATA
FLOW OF DATA WITH HEADER COMPRESSED (SOURCE DATA AND ADDITIONAL INFO
Fig. 9B
ORIGINAL PACKETS RECONSTRUCTED
Paquets originaux reconstruits
COMPRESSION/ DECOMPRESSION MODULE 7
GENERATED ADDITIONAL PACKETS
ORIGINAL DATA ESTIMATED
Données d'origine estimées
information extra (CSI, DRI) quantifiée
Paquets sup vers le canal
ADDITIONAL PACKETS TOWARD CHANNEL
observations de canal
Décodeur de canal 3
Codeur de canal 2
FLOW OF DATA
CHANNEL DECODER
CHANNEL CODER
ADDITIONAL INFORMATION (CSI, DRI) QUANTIFIED
9/10

Fig. 10


CHANNEL DECODER 3
DRI
SAI
NETWORK LAYER
Couche réseau i (RTP)
.....(UDP) 6
Couche réseau k (IP)
NETWORK LAYER
Module de compression/ décompression
NETWORK ACCESS
Accès réseau
CHANNEL Canal 5
Flux de données
CHANNEL CODER/DECODER 2,3
FLOW OF DATA
COMPRESSION/ DECOMPRESSION MODULE
ORIGINAL PACKETS RECONSTRUCTED
Paquets d'origine reconstruits
ADDITIONAL PACKETS GENERATED
Paquets supplémentaires générés
COMPRESSION/ DECOMPRESSION MODULE 7
Paquets supplémentaires ADDITIONAL PACKETS
FLOW OF DATA ESTIMATES
ADDITIONAL INFORMATION TOWARD DECODER
ADDITIONAL INFORMATIONS TOWARD CHANNEL
Flux de données
Décodeur de canal 3
Codeur de canal 2
FLOW OF DATA
CHANNEL DECODER
CHANNEL CODER
Codeur de source 1
SOURCE CODER
CSI
SSI
NETWORK LAYER
Couche réseau i (RTP)
.....(UDP) 6
Couche réseau k (IP)
NETWORK LAYER
COMPRESSION/ DECOMPRESSION MODULE
Module de compression/ décompression
NETWORK ACCESS
Accès réseau
Codeur de canal 2
Flux de données
CHANNEL Canal 5
FLOW OF DATA
CHANNEL CODER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Identification
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Protocol
Checksum
Source address
Destination address
Source Port
Destination Port
Datagram Length
Checksum
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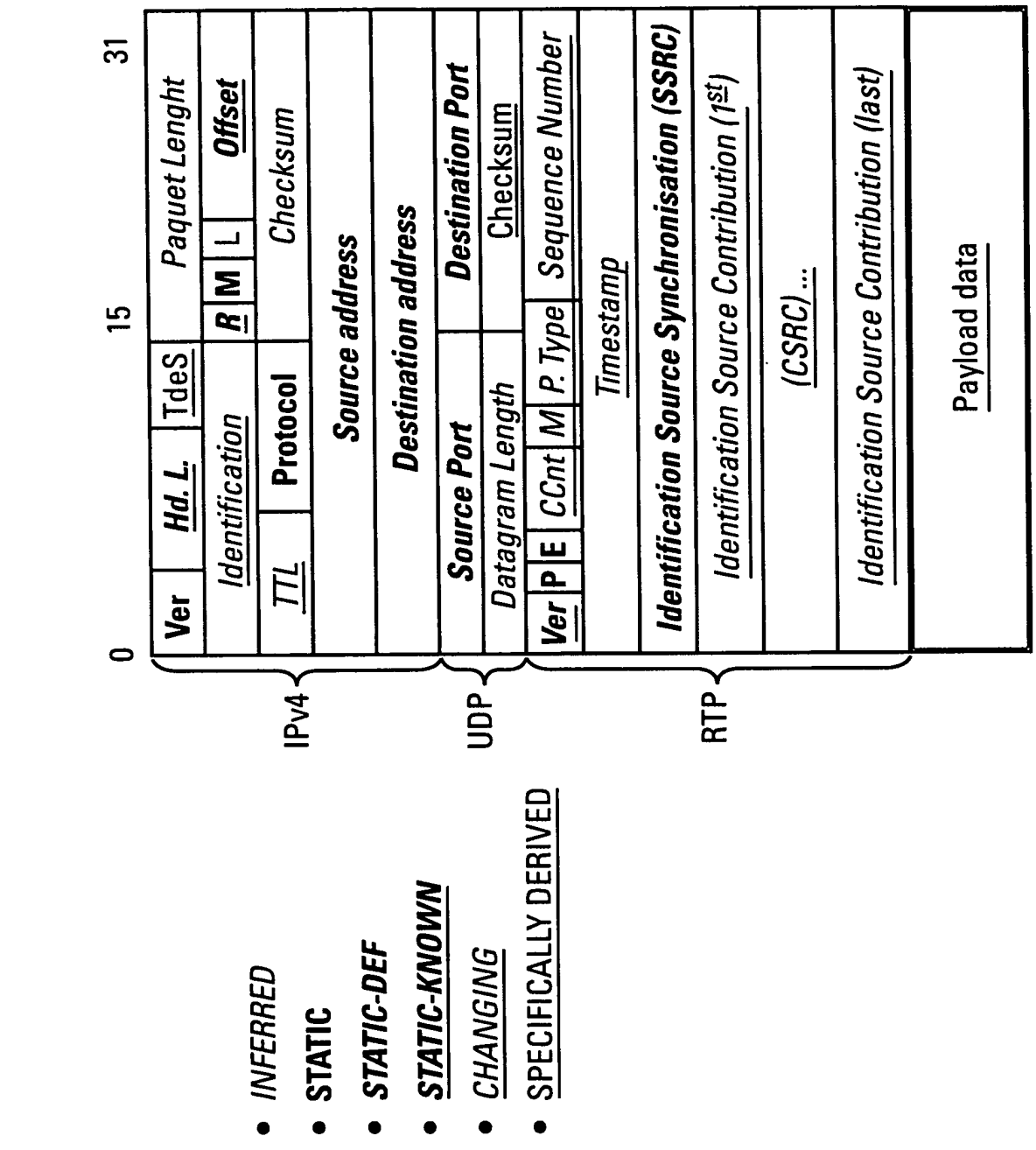
P. Type
Sequence Number
Timestamp
Identification Source Synchronisation (SSRC)
Identification Source Contribution (1st)
(CSRC) ...
Identification Source Contribution (last)
Payload data
IPv4
UDP
RTP
• RECOPIED
• INFERRED
• SPECIFICALLY DERIVED

Fig. 11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Paquet Lenght
Identification
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TTL
Protocol
Checksum
Source address
Destination address
Source Port
Destination Port
Datagram Length
Checksum
Ver
P
E
CCnt
M
P. Type
Sequence Number
Timestamp
Identification Source Synchronisation (SSRC)
Identification Source Contribution (1st)
(CSRC) ...
Identification Source Contribution (last)
Payload data
IPv4
UDP
RTP
INFERRED
STATIC
STATIC-DEF
STATIC-KNOWN
CHANGING
SPECIFICALLY DERIVED

Fig. 12

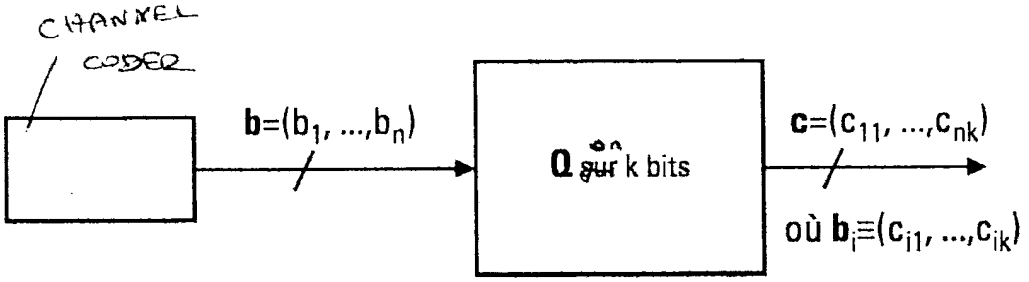

Fig. 13

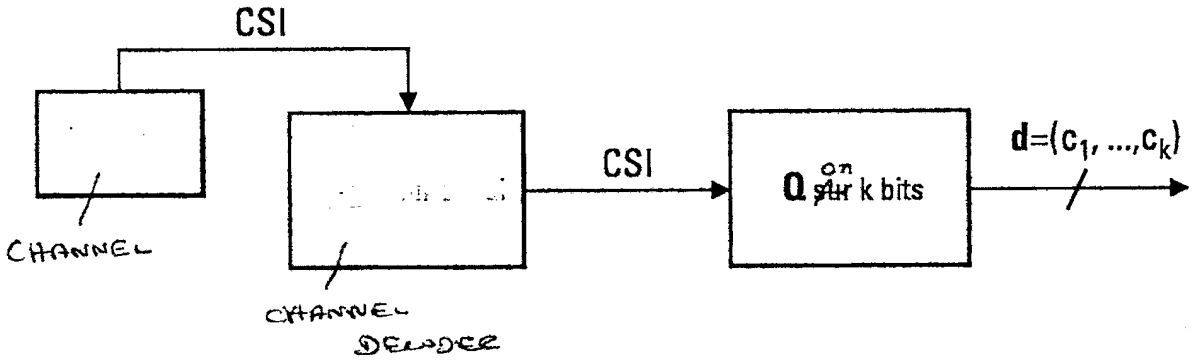

Fig. 14

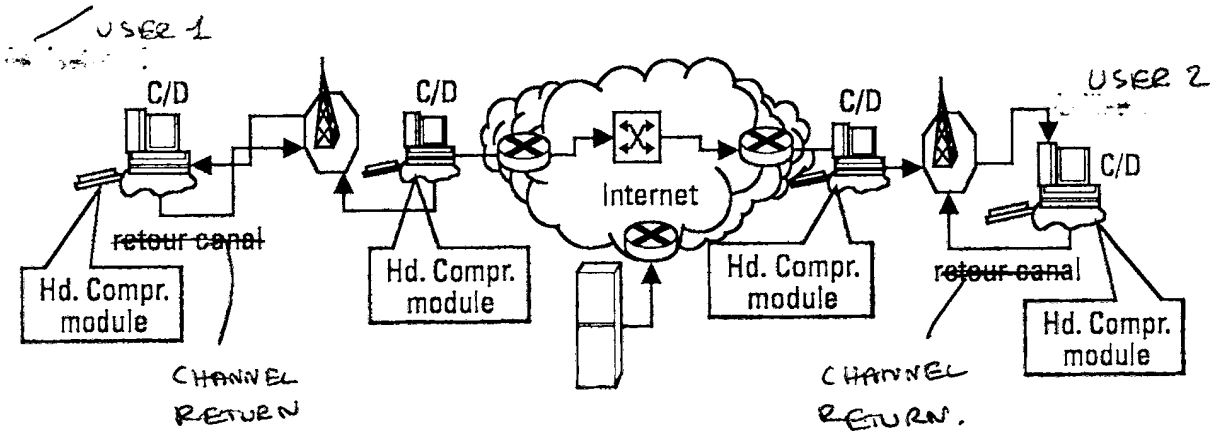

Fig. 15